Claims

1. Method for the isolation of RNA from samples, characterised by the following method steps:

a) provision of a magnetite solid phase;

b) provision of a binding buffer which comprises guanidinium thiocyanate in a concentration which, after mixing with the sample, produces a final concentration of > 2.5M guanidinium thiocyanate;

c) mixing of the sample with the magnetite solid phase and the binding buffer, where a phosphate concentration which supports the binding of RNA is present in this mixture;

d) isolation of the solid phase with the bound RNA.

2. Method according to Claim 1, characterised in that, after step d), the solid phase is optionally washed, and the RNA is subsequently eluted from the solid phase.

3. Method according to Claim 2, characterised in that the elution is carried out using elution buffers which facilitate a pH range > 7 and comprise phosphate.

4. Method according to one or more of Claims 1 to 3, characterised in that the binding buffer additionally comprises chelators, such as EDTA.

5. Method according to one or more of Claims 1 to 4, characterised in that the solid phase consists of magnetite particles having a diameter of 0.01 to 2 µm and a specific surface area of 1 – 100 m^2/g.

6. Kit for the isolation of RNA by the method according to one or more of Claims 1 to 5, at least comprising a magnetite solid phase and a binding buffer having a GTC concentration of greater than 3 mol/l.

7. Kit according to Claim 6, characterised in that the binding buffer comprises at least between 4 and 8 mol/l of GTC and between 5 and 200 mmol/l of EDTA.

8. Kit according to Claim 6 or 7, characterised in that the kit additionally comprises one or more of the following constituents:

- an elution buffer
- a wash buffer
- a phosphate salt solution.